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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,860	08/04/2003	Hideki Kuwajima	2003_1086A	4624

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EXAMINER

BLOUIN, MARK S

ART UNIT PAPER NUMBER

2653

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,860

Applicant(s)

KUWAJIMA ET AL.

Examiner

Mark Blouin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/4/03 & 12/17/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Detailed Action

Drawings

1. Figures 9 and 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1⁴~~3~~ and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Owe et al (EP 0342625).

4. Regarding Claims 1, 2, and 6-8, Owe et al shows (Figs. 1 and 2), a disk drive apparatus comprising a disk rotative driving means for driving the disk, and head driving assembly for performing writing information into a predetermined track position of the disk or reading information out of a predetermined track position, a head driving assembly comprising a bearing portion for supporting the head supporting assembly for rotation in a direction parallel to a disk surface, and driving means for rotating the head supporting assembly in the direction parallel to

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the disk surface(Col 1, lines 1-54), and a head supporting assembly (Fig. 1) comprising a head performing at least one of recording and reproduction on a disk, a head supporting member parallelly displaced made up of the head (13), a head mount (12) with the head mounted thereon, and a supporting arm (11) with the head mount attached to one end thereof, a base arm (15) provided with a rotation-supporting portion for supporting the head supporting member for rotation in a direction vertical to a surface of the disk, and a resilient member (17) having one end thereof connected (17b) with the other end of the supporting arm and the other end thereof fixed (screws 16) to the base arm for urging the head supporting assembly toward the disk, wherein the rotation-supporting portion of the base arm is provided at such a position that the head mount is allowed to be displaced thereto by pressing of the rotation-supporting portion in the pressing direction.

5. Regarding Claims 3 and 4, Owe et al shows (Figs. 1 and 2), the resilient member is a plate spring member (17) disposed between the base arm (15) and the supporting arm (11) so as to be bilaterally symmetric (around longitudinal centerline A-A), and resilient member has length L1 from the connected portion with the supporting arm to the fixed portion with the base arm, the length L1 satisfying relationship $L2/L1 \geq 0.5$, where L2 is a length from the rotation-supporting portion to the connected portion (See Examiner's Drawing).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Owe et al (EP 0342625) in view of Berding (USPN 5,936,803).

8. Regarding Claim 5, Owe et al shows (Figs. 1 and 2), all the features described, *supra*, but does not show a center of gravity of the head supporting member is positioned on a rotation axis of the rotation-supporting portion provided on the base arm.

Berding shows (Fig. 3) a center of gravity of the head supporting member (120) is positioned on a rotation axis of the rotation-supporting portion provided on the base arm (the supporting member (120) is mass balanced around rotation line "A").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to mass balance the head suspension mechanism of Owe et al as taught by Berding. The rationale is as follows: One of ordinary skill in the art at the time the invention was made would have been motivated to mass balance the head suspension mechanism of Owe et al as taught by Berding in order improve shock resistance.

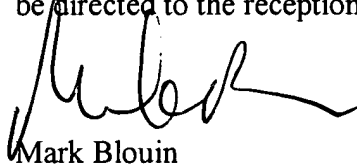
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is (703) 305-5629. The examiner can normally be reached M-F, 6:00 am – 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, William Korzuch can be reached at (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314 for regular and After Final communications.

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Any inquiry of general nature or relating to the status of application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



Mark Blouin
Patent Examiner
Art Unit 2653
March 28, 2005

A. J. HEINZ
PRIMARY EXAMINER
GROUP ~~2653~~ A.U. 2653

